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#### **ABSTRACT**

A system for and method of mapping successive bits of digital data into BPSK symbols using one or more BPSK symbol constellations such that orthogonal BPSK constellations are applied to successive bits of the digital data. The system and method may toggle between applying first and second orthogonal constellations as successive bits of the digital data are encountered. Alternatively, the system and method may successively rotate by  $90^\circ$  the constellation to be applied as successive bits of the digital data are encountered.